Application No. 10/563,626 Reply to Office Action of November 28, 2008

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A light detecting apparatus comprising:

in which a distal end of an optical fiber probe whose distal end faces a surface that it measures for measurement, the probe forming a spot of light from said optical fiber probe is formed on said surface for measurement, and detecting light from said surface for measurement is detected by said optical fiber probe, wherein; and

a probe controller that switches the apparatus between broad range measurement

mode and high resolution measurement mode by controlling a distance between the distal end

of said optical fiber probe and said surface for measurement, wherein

the apparatus has a said broad range measurement mode exploiting exploits the light propagated through a core of said optical fiber probe and [[a]] said high resolution measurement mode exploiting exploits near-field light seeping from said core of said optical fiber probe.

- 2. (Canceled).
- 3. (Currently Amended) The light detecting apparatus according to claim [[2]] 1, wherein switching is made said probe controller switches to said broad range measurement mode when by controlling said distance to exceed exceeds a preset value and wherein switching is made to said high resolution measurement mode when by controlling said distance is not larger than to not exceed said preset value.
- 4. (Currently Amended) The light detecting apparatus according to claim [[2]] 1, wherein said probe controller switches switching is made between said broad range

Application No. 10/563,626

Reply to Office Action of November 28, 2008

measurement mode and said high resolution measurement mode based on said distance

correlated to the value of the diameter of a light radiating aperture formed centrally of the

distal end of a core of said optical fiber probe.

5. (Canceled).

6. (Currently Amended) The light detecting apparatus according to claim [[2]] 1,

wherein said a light radiating aperture is formed centrally of the distal end of said core.

7. (Original) The light detecting apparatus according to claim 1 wherein a light

shielding coating layer is formed at the distal end of said core.

8. (Currently Amended) The light detecting apparatus according to claim 1 wherein

said probe controller switches switching is made to said high resolution measurement mode

after detecting the light from said surface for measurement by said broad range measurement

mode.

9. (Currently Amended) The light detecting apparatus according to claim 1 further

comprising:

a light source [[for]] radiating said propagated light; and

a wavelength controller controlling means for controlling the wavelength of the light

radiated from said light source.

10. (Currently Amended) The light detecting apparatus according to claim 9, wherein

said wavelength controlling means controller switches the wavelength of the light radiated

4

from said light source between said broad range measurement mode and said high resolution measurement mode.

11. (Currently Amended) The light detecting apparatus according to claim 9, wherein said optical fiber probe has a light shielding coating layer in such a manner that a light radiating aperture is formed centrally of the distal end of said core, and wherein

said wavelength controlling means controller controls the wavelength of the light radiated from said light source to a wavelength determined based on the material of said light shielding coating layer.

- 12. (Currently Amended) The light detecting apparatus according to claim 9 further comprising <u>a</u> light monitor means for monitoring the <u>said</u> propagated light radiated from said light source.
- 13. (Currently Amended) A light detecting method in which a distal end of an optical fiber probe faces a surface for measurement, the method comprising:

<u>forming</u> a spot of light from said optical fiber probe is formed on said surface for measurement;, and

detecting light from said surface for measurement is detected by said optical fiber probe[[,]]; and

switching between broad range measurement mode and high resolution measurement mode by changing a distance between the distal end of said optical fiber probe and said surface, wherein

the method has a broad range measurement mode exploiting exploits the light propagated through a core of said optical fiber probe and [[a]] the high resolution

measurement mode exploiting exploits near-field light seeping from said core of said optical fiber probe.

- 14. (Canceled).
- 15. (Currently Amended) The light detecting method according to claim 13 [[14]] wherein switching is made to said broad range measurement mode when said distance exceeds a preset value and wherein switching is made to said high resolution measurement mode when said distance is not larger than said preset value.
- 16. (Currently Amended) The light detecting method according to claim 13 [[14]] wherein switching is made between said broad range measurement mode and said high resolution measurement mode based on said distance correlated to the value of the diameter of a light radiating aperture formed centrally of the distal end of a core of said optical fiber probe.
 - 17. (Canceled).
- 18. (Currently Amended) The light detecting method according to claim 13 wherein the detecting the light from said surface for measurement is detected by an optical fiber probe in which includes forming a light radiating aperture is formed centrally of the distal end of said core.
- 19. (Currently Amended) The light detecting method according to claim 13 wherein the detecting the light from said surface for measurement is detected by includes forming a

Application No. 10/563,626

Reply to Office Action of November 28, 2008

light shielding coating layer in an optical fiber probe in which a light shielding coating layer

is formed at the distal end of said core.

20. (Currently Amended) The light detecting method according to claim 13, wherein

switching is made to said high resolution measurement mode after detecting the light from

said surface for measurement by said broad range measurement mode.

21. (Original) The light detecting method according to claim 13 further comprising a

light radiating step of radiating said propagated light and a wavelength controlling step of

controlling the wavelength of light radiated from said light radiating step.

22. (Currently Amended) The light detecting method according to claim 21 wherein

said wavelength controlling step includes switching switches the wavelength of light radiated

in said light radiating step between said broad range measurement mode and said high

resolution measurement mode.

23. (Currently Amended) The light detecting method according to claim 21 wherein

the detecting the light from the surface for measurement is measured by includes said

optical fiber probe having a light shielding coating layer formed for forming a light radiating

aperture, and

wherein, in said wavelength controlling step, the wavelength of light radiated in said

light radiating step is controlled to a wavelength determined based on the material of said

light shielding coating layer.

7

Application No. 10/563,626 Reply to Office Action of November 28, 2008

24. (Original) The light detecting method according to claim 13 further comprising a light radiating step of radiating said propagated light and a light monitor step of monitoring the propagated light radiated in said light radiating step.